



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,634	12/28/2004	Christopher Davies	3556 P 006	9142
23424	7590	07/11/2006	EXAMINER	
WALLENSTEIN & WAGNER, LTD. 311 SOUTH WACKER DRIVE 53RD FLOOR CHICAGO, IL 60606			A, MINH D	
			ART UNIT	PAPER NUMBER
			2821	

DATE MAILED: 07/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/519,634

Applicant(s)

DAVIES, CHRISTOPHER

Examiner

Minh D. A

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-10 and 12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-10 and 12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION.

Applicant's communication filed on 5/1/06 has been carefully considered by the examiner. The arguments advanced therein are persuasive with respect to the rejection of record, and those rejection are accordingly withdrawn. In view of a further consideration, however, a new rejection is set forth below. This action is not made final.

Specification

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) **TITLE OF THE INVENTION.**
- (b) **CROSS-REFERENCE TO RELATED APPLICATIONS.**
- (c) **STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.**
- (d) **THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT**
- (e) **INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC** (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (f) **BACKGROUND OF THE INVENTION.**
 - (1) **Field of the Invention.**
 - (2) **Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.**
- (g) **BRIEF SUMMARY OF THE INVENTION.**
- (h) **BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).**
- (i) **DETAILED DESCRIPTION OF THE INVENTION.**
- (j) **CLAIM OR CLAIMS** (commencing on a separate sheet).

Art Unit: 2821

- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1, 4-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the phrase "wherein when the body moves in one direction a phase length at least a first open circuit associated with the first plurality of conductive strips is lengthened and a phase length at least a second open circuit" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention, which elements or drawing disclose a first and second open circuit and a phase length. See MPEP § 2173.05(d).

Claim Objections

3. Claim 1 is objected to because of the following informalities:

Regarding claim 1, lines 8-9, should be deleted "at ". Appropriate correction is required.

Claim Rejections - 35 USC § 102

Art Unit: 2821

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 12 is rejected under 35 U.S.C. 102(b) as being anticipated by Butland et al (US 5,440,318).

Regarding claim 12, Butland disclose a round tilting antenna array comprising:
a phase shifting device comprising: a body slidable relative to a printed circuit board;
and, a plurality of oppositely sensed antenna elements (1-4) mounted to the circuit board(5) in a vertical elongate array and defining upper antennae and lower antennae, the upper antennae being connected to feed lines(8-9, 10) that are lengthened when the body is moved in a first direction and the lower antenna elements being connected to the feed lines that are shortened when the body is moved in the first direction, whereby a phase shift is caused along the length of the array. See figures 1, 4D, 5A, col.2, lines 51-67 to col.5, lines 1-47.

Allowable Subject Matter

6. Claims 1, 4-10 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Citation of relevant prior art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sinsky (US 6,208,222) and West et al. (US 6,650,291) are cited to show a phase shifter array antenna.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Dieu A whose telephone number is (571) 272-1817. The examiner can normally be reached on M-F (5:30 AM-2:45 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on (571) 272-1740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/519,634
Art Unit: 2821

Page 6

Examiner

Minh A

Art Unit 2821

6/30/06

Shih-Chao Chen
SHIH-CHAO CHEN
PRIMARY EXAMINER